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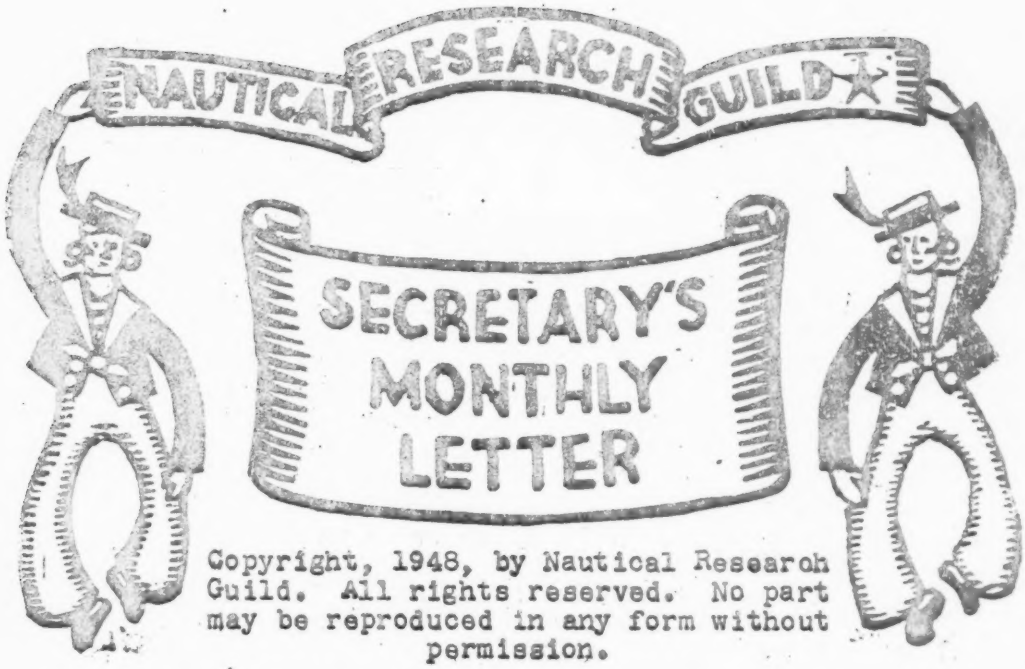

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Robert A. Nash, Secretary-Treasurer, 20 S. Baldwin Ave.
Sierra Madre, California

Volume I July, 1948 Number 6

AN INTERESTING HALF MODEL, A CHEBACCO PINKY OF 1828

Driftwood Gaff

Every American is proud and justly so, of the famous fore and afters that have hailed from the most famous fishing port in the world, Gloucester, Massachusetts. This section of our country is affectionately called "Down East". All vessels that engage in the fishing industry must stand the buffeting of the wild Atlantic both summer and winter. The writer is fortunate enough to possess a beautiful half model of one of these vessels called a Chebacco pinky. This half model was made by the man, who, probably knows more about early "Down East" fishing vessels than any one else. His name is Mr. Lewis H. Story of old Chebacco, now Essex, Massachusetts. The characteristics of the pinky are its well rounded apple shaped bow, rough and ready construction, and pecular up-turned "pink" stern. Their average length was about 40 to 50 feet. Their construction was so rugged that they were frequently built near the source of timber supply and pulled to the launching by ox teams. Mr. Charles G. Davis in his "Ships of The Past" and Mr. Howard I. Chappels in his "History of American Sailing Ships" give important material on pinkys.

The date of the lines of my unusual half model is Chebacco, Essex, Massachusetts, 1828. The backboard is 3/8" plywood 7" x 23". The top half is painted a dark sky blue. The lower half a dark green. The joint made by these two colors represents the water line of the half model. The profile of the model resembles the profile of a sea gull. Well rounded forward and pinked up aft. These tiny craft rode the waves with a grace and beauty equal to that of a gull. There is a rope lashing for the bowsprit gammoning. The foremast is unusually far forward and the main mast slightly aft of amidships. Topsides are painted light green with the usual white stripe following the waist line. The underbody is a beautiful dark brown. This half model has attracted much attention wherever it has been exhibited.

Please understand that I do not claim the painting plan of this model to be authentic as there may have been no dark brown paint suitable for the underbody at that time. However, there was plenty of green, white and other colors. Black was also extensively used. Neither do I claim that this was the type of half hull used in 1828. Most of these vessels were built by rule of thumb. If a half model was used at all it was probably one of those "open frame models" and not many of them "survived the vicissitudes of time". This tiny reminder of the days of sail on the fishing banks recalls the time when safety and comfort were the main objects of a voyage. Speed and cargo had not dominated the field neither had the Deisel engine and the cut away forward models of our last few Gloucester Fishermen been even visualized.

THE ORIGIN AND THE CHRONOLOGY OF THE CLIPPER SHIPS. PART II.

Bernard Berenson, M. D.

A true example of a clipper ship had three characteristics in order to qualify for membership in this glorious company. She had to have fine ends, especially at the entrance. Also she had to have a very generous sail plan, much larger than that of the ordinary merchant ships of the day. And lastly, if she was to live up to her heredity and expectations, she had to have a bold and experienced man on the quarterdeck, who was not afraid to carry sail beyond the time dictated by the seamanlike practice of the day, for "a good master makes a good ship."

The American clipper ships were built from 1846 to 1859 for the following trades: The China trade (mainly tea and silks), the California trade (passengers and general cargo), and the Australian trade (emigrants and general cargo). In 1847 two merchant ships and nine whaling ships called at San Francisco.

In the following year gold was discovered in California, and as a result, in 1849, 775 vessels cheared from ports on the Atlantic coast of the United States for San Francisco, and in the same year 91,405 people landed at that city from all over the world. The scarcity of food and supplies and the eager haste of the gold-seekers to get to California as soon as possible caused both shipowners and shipbuilders to demand and strive for the fastest possible ships, and the boldest officers outdid each other in sail carrying and in hard driving of these ships in their lust for record passages to the Golden Gate. In 1849 the "Oriental" was launched and made such a reputation for herself that she helped to hurry the construction of the first of the British tea clippers, as will be seen later. Also in this same year the British Navigation Act was repealed, thus throwing open a vast and world-wide trade to the ships of all nations.

The true clipper ships received their body lines primarily from the Baltimore clippers, their full-bodied midship sections from the Canton packets, and their best and boldest commanders from the Western Ocean packets. The China tea trade, which opened in 1843, made speed a desirable quality, but there was little sacrifice of carrying capacity to achieve it. However, with the discovery of gold in California in 1848, speed became overwhelmingly pre-eminent in the characteristic sought for among the five qualities of ship design, namely: strength, speed, stability, carrying capacity, and economy of operation. All the other qualities were more or less seriously compromised in the mania for speed. As a result, in 1850 each big shipyard brought out its first out-and-out clipper ship. William Webb launched the "Celestial," Samuel Hall the "Surprise," Donald McKay the "Stag Hound," George Raynes the "Sea Serpent", Paul Curtis the "Witchcraft," and twelve other yards sent forth their ships to join this select company during the year. All told, there were 24 clippers launched during this year, of which 13 were intended for the California trade. During but six months of this year 1,360 vessels were launched on the East coast, of which 247 were full-rigged ships. Clippers were always a small but aristocratic minority of the vessels launched in any year or anchored in any harbor. In 1850 the finest ships in the China trade were diverted to the California run, for these ships received higher freight rates than the ordinary ships of the day.

In 1851 gold was discovered in Australia, providing another tremendous stimulus to the building and operating of larger clipper ships. During this year, the "Challenge," the "Flying Cloud," the "N. B. Palmer," and the "Nightingale" were among the 54 clippers launched, of which 31 were meant for the California trade. Also during this year the United States reached the zenith of its maritime power, and had outstripped Great Britain in carrying capacity and earning power, though not in gross tonnage.

In 1852 the "Sovereign of the Seas", the "Westward Ho," and the "Bald Eagle" were among the 75 clippers launched, of which 33 were destined for the California trade.

In 1853 Maury's "Physical Geography of The Sea" was published, and proved to be of material aid in the expeditious prosecution of voyages under sail to all ports of the world. During this year, the building, owning, and racing of clipper ships in the United States reached its zenith. Speed, strength, and carrying capacity (in that order) were the paramount factors in the design of these ships. Where carrying capacity was of prime importance, the later big four-masted iron and steel barques resulted. Where economy of initial cost and of operation were the prime factors, the American three, four, and five-masted schooners were the result. Where strength was of the greatest concern, the American whaling ships and barques were the type which resulted. And where strength and stability were of the greatest importance, the big 100-gun ships-of-the-line, such as Nelson's "Victory," were the result. In 1853 the "Chariot of Fame," the "David Crockett," the "Dreadnought," the "Red Jacket," the "Great Republic," the "Sweepstakes," the "Young America," the "Herald of the Morning," and the "Romance of the Seas" were among the 121 clippers launched, of which 48 were intended for the California trade.

In 1854 the last of the extreme clippers were launched. Among these were the "Champion of the Seas," the "Lightning," and the "James Baines." During this year 71 clippers were launched, of which 20 were intended for the California trade.

In 1855 no more extreme clippers were built; instead, the slightly fuller-bodied medium clippers were built, to the number of 42, of which 13 were built for the California trade. Launched during the year were the "Andrew Jackson," the "Charmer," and the "Donald McKay."

In 1856 forty clippers were launched, of which eight were built for the California trade. Among those launched were the "Intrepid," the "Mastiff," and the "Uncowah."

In 1857 only ten clippers were launched, of which four were meant for the California trade. The "Belvidere" and the "Twilight" were among those launched during the year.

In 1858 but six clippers were launched, and in 1859 the last three of this glorious company slid down the ways. Included among them were the "Prima Donna," the "Star of Peace," (both in '58) and the "Maid of the Sea." 1859 was the last year in which an American clipper ship took part in the English tea races from China.

After the American Civil War began, very few deepwater merchant ships were built. By the end of the war construction had increased somewhat, and the ships launched since then have been known by the sobriquet of "Down Easters," to differentiate them from their predecessors, the extreme and the medium clippers.

There were between 450 and 500 American clipper ships, the average measurements being: length 200 feet, beam 40 feet, depth 20 feet, and registering about 1500 tons.

SUMMARY.

From the beginning of this study we find, in order, the Virginia-built privateers, the Norfolk pilot boats, the Baltimore clippers (privateers, smugglers, and slavers), opium clippers (country-built, British, and American), the Canton packets, and, by a collateral line, the Western Ocean packets; following these came the China clippers, then the California clippers, then the Australian clippers, and last of all the medium clippers.

The repeal of the British Navigation Acts, the sudden expansion of the China tea trade and the discovery of gold in California, all occurring at about the same time hastened the evolution of the clipper ship, for, profiting by the performance and characteristics of the square-rigged Baltimore clippers, the Western Ocean packets and the opium clippers forward-looking men evolved the California clipper ships, which had no rivals afloat, either in appearance or performance.

THE BRITISH CLIPPER SHIP ERA

The British clipper ship era began with the launching of the "Stornoway" at the yard of Alexander Hall at Aberdeen, Scotland in the Fall of 1850. The American China clipper "Oriental" had a marked influence on the design of the early British tea clippers with the exception of the "Stornoway." The performance of the "Oriental," the "Samuel Russell," and the "Sea Witch" caused the British to be stimulated to the recognition of the need for fast ships to be built and operated by them in this trade. The "Oriental" was the first non-British ship to bring a cargo of tea to England, as the restrictive Navigation Act had been repealed in the previous year. Fearing that this lucrative trade would be lost to the faster American ships, Hall was commissioned to design and build the "Stornoway" by Jardine, Matheson and Company, the same firm for which this yard had built the opium clipper-schooner "Torrington" in 1845.

In 1851 the same yard launched the "Chrysolite," and in the following year the "Challenger" was launched by Green of Black-

wall. In 1853 the first all-iron tea clipper was launched, being named the "Lord of the Isles." She indicated the future course of British shipbuilding in the material of her construction. From this date on, until 1863, increasing numbers of tea clippers, usually wooden vessels of 500 to 900 tons (therefore considerably smaller than the American clipper ships of the same time) were launched from British shipyards, thirteen being launched in 1863. In 1863 the first composite tea clippers were built, among the first being the famous "Ariel" and the "Black Prince."

The British tea clippers were built from 1850 to 1870, the "Lothair" of 794 tons being the last one. In 1852 the English merchants were commissioning American shipyards to build big clippers for them to take part in the booming Australian passenger trade. Among this number were the "Lightning," the "James Baines," and the "Red Jacket," which carried many gold-seekers to Australia from English ports.

In 1869 the Suez Canal was opened, spelling the death-knell for the extreme clippers of British origin, for from then on all the advantages were with the rapidly improving steamships. During this year there were launched the "Norman Court," the unlucky "Caliph," and the famous "Cutty Sark" which is still afloat in an English port, a member of the most exclusive society in the world, the Society of Preserved Ships, which has included Sir Francis Drake's "Golden Hind," Nelson's "Victory," the United States Frigate "Constitution," and the well-known little "Joseph Conrad."

From 1866 on, the number of iron (and later, steel) clippers for the Australian wool trade were built in increasing numbers until 1876, when eight were launched, including the handsome ships "Aristides" and "Harbinger." From then on the number launched each year gradually decreased until 1891, when only the two widely known sister-ships "Mount Steward" and "Cromdale" were launched from Barclay, Curle's yard at Glasgow.

PRINCIPAL BOOKS CONSULTED

Chapelle: History of American Sailing Ships
Chapelle: The Baltimore Clipper
Clark: The Clipper Ship Era
Cutler: Greyhounds of the Sea
Derby: The Tall Ships Pass
La Grange: Clipper Ships
Laing: Clipper Ship Men
Lubbock: The China Clippers
Lubbock: The Colonial Clippers
Lubbock: The Opium Clippers
Lubbock: The Western Ocean Packets
Matthews & Howe: American Clipper Ships

SEA CANNON THROUGH THE AGES. PART IV.

Winthrop Pratt, Jr.

DAHLGREN GUN. After Lt. John A. Dahlgren, U. S. N., the first one being produced in 1852, according to Hammersley. (See also "Columbiad" and "Rodman.") A bottle-shaped shell gun used extensively during the Civil War. Farrow says 9", 10", 11", and 15", while Hammersley indicates that there was an 8" gun. Very also lists them, as does Rowan. To sum up, all Dahlgrens were muzzle-loading, cast iron, smooth-bore guns, except a bronze 20 pdr. which was a muzzle-loading rifle. Dahlgrens were made in 4" - 20 pdr., 8", 9", 10"-125 pdr., 11", 13", 15", and 20", and ranged from 6.9 ft. to 16.98 ft. over all length. Lt. Dahlgren was also responsible for the invention of several types of field pieces and boat guns.

DEMI-CANNON. See "Cannon."

DEMI-CULVERIN. See "Culverin".

DEMI-SLING. See "Sling."

DOUBLE CANNON. See "Cannon."

DOUBLE-FORTIFIED. Or "Extraordinary." Generally speaking, the term applies to a piece made extra heavy in order to take a more powerful charge, giving longer range and greater force. Hanson, in 1771-75, says the thickness of metal at the touch-hole was equal to one caliber, whereas the "legitimate" piece was 7/8 caliber at that point. He further states that double-fortified culverins "are 1 1/8 calibers at the touch hole." Brewington, in the "Neptune" for April, 1943, says that a double-fortified 4 pdr. was about equal in force to a legitimate 6 pdr., but not as accurate.

DRAGON. Farrow says "a small blunderbus and a short hand-gun of great bore, so-called because it had a dragon's head at the muzzle. See also "Culverin" and "Dragon-Drake."

DRAGON-DRAKE. A whole Culverin. (See "Culverin.")

DRAGON et DRAGON VOLANTE. Farrow says "two ancient types of artillery." The Dragon being a 40 pdr., 16½ ft. long, of 7000 lbs., and the Dragon-Volante a 32 pdr., 22' long, of 7200 lbs. These pieces seem large for ship guns.

DRAKE. Apparently an early 16th century term used with the name of the piece to denote the largest of its group, or

"whole piece," as "Saker-Drake," "Culverin-Drake," etc. Farrow, however, says it was a small piece of artillery of ancient times. Obviously, then (as is not infrequently the case), the same term had different meanings at different times.

DART a FEU. See "Fire-Arrow."

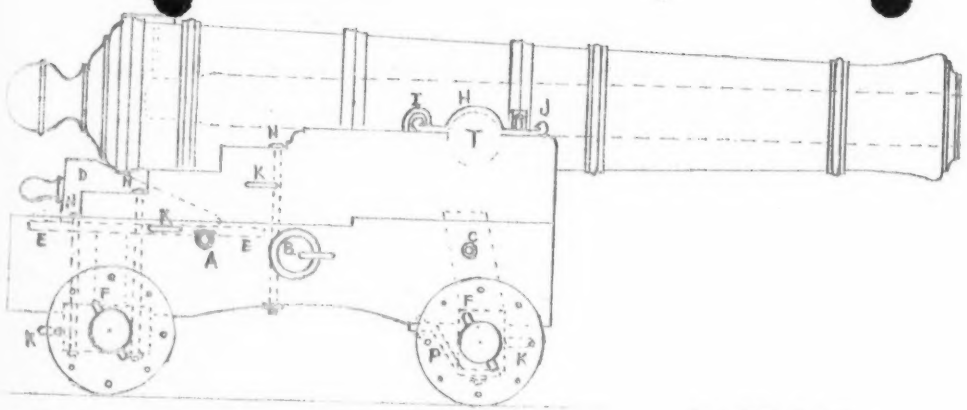
ELDEST DOUBLE CANNON. The largest cannon, generally. See "Cannon."

EMERILLON. St. Remy (3rd edition, 1745) says it was a ½ pdr., 4 to 5 ft. long, and of 400 to 450 pounds weight. I do not find it listed elsewhere.

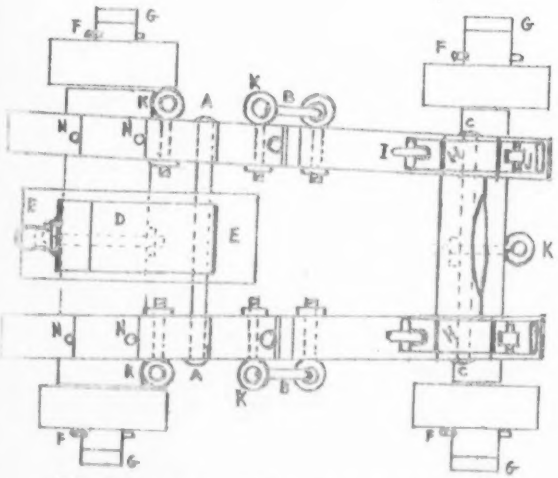
ESPINGAR. ESPINGARD. ESPINGARE. Spanish, - ESPINGARDA. Farrow says it is an ancient name for a small gun under a 1 pdr., and dates from the 14th century. De. Gravierre describles it as a bronze arm, mounted on a pivot, and firing small moulded bullets not over a pound in weight. It was used on the French galleys for many years. Obviously, a light swivel-gun similar to the caliver and arquebus (which see). The name is of Spanish origin - espingarda, the gunner or "musketeer" being called "espingardero," and it is often mentioned as a long hand-gun or musket of Morocco.

FALCON, (Italian "Falcone, "French "Faucon.") Derives from Latin "Falco" - a hawk. Webster says a small piece of ordnance of the 15th to 17th centuries. (Actually the term was in use as late as the last half of the 18th century.) Moore, 1694, calls it a half-saker (see Saker). The term was also anciently applied to a tyoe of battering ram. Their sizes seem to have changed during various periods, as Tartaglia, 1583, says they were from 5 to 7 pounders, and of the culverin class. Other later authorities list them as 6 or 7 ft. long, lighter and slenderer than other guns, and firing a shot of 2 or 3 pounds. Falcons were of both iron and bronze, and may have been either breech or muzzle-loaders, depending on the period. St. Remy lists a 3 pdr., of 2300 pounds weight, and 8 feet in length.

FALCONET. (French "Fauconneau, "Italian "Falconetto.") Same derivation as Falcon. A small falcon, and of like design but lighter in weight. Tartaglia lists a 3 pdr., 5½ ft. long, of 1300 lbs. while Norton has one of 1 3/7 lbs., 6 ft. long, but only 500 lbs. in weight. Bourne lists a 1-1/8 pdr., of 360 to 400 lbs. weight, and Manson, a 4 footer with a bore of 2". (sometimes used as a light field gun, also.) St. Remy lists a "fauconneau" of 10½ ft. length,



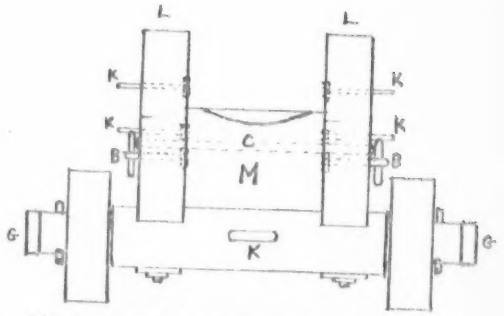
BROADSIDE ELEVATION OF GUN AND CARRIAGE



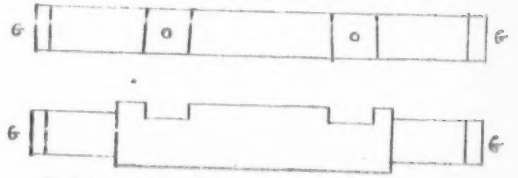
PLAN OF THE CARRIAGE

A ~ BED BOLT
B ~ BREECHING RING
C ~ TRANSOM BOLT
D ~ QUOIN BLOCK
E ~ QUOIN BED
F ~ LINCH PINS
G ~ IRON BANDS
H ~ CLAMPS
I ~ LOOP or STAPLE
J ~ FORELOCK PIN
K ~ EYEBOLTS
L ~ CHEEKS or SIDES
M ~ TRANSOM
N ~ THROUGH BOLTS
T ~ TRUNION
P ~ FORE AXLETREE BRACE

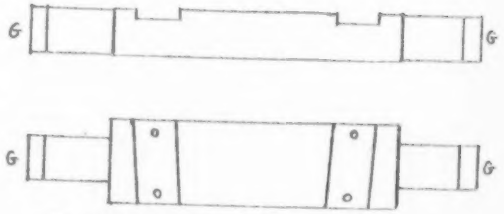
NOTE: THE EYEBOLTS, K, IN THE CHEEKS USUALLY HAVE THE NUTS LET IN FLUSH ON THE INSIDE.



FORE END OF CARRIAGE



ELEVATION AND PLAN OF FORE AXLE~TREE



ELEVATION AND PLAN OF HIND AXLE~TREE

SCALE: ½ inch = 1 foot.

A LONG 32 POUNDER BRASS CANNON CA. 1775.

Winthrop Pratt, Jr. 89

1350 lbs. weight, and firing a 2 lb. shot. Farrow lists falconnets as the smallest class of cannon.

FIRE-ARROW. "French "Dart a Feu.") Should of course be classed as ammunition. Falconer, 1776, says it was a small iron dart made up with "springs and bars," on the shaft of which is wound a match (fuse) impregnated with powder and sulphur, usually being discharged from a musketoon or a swivel-gun, the match being lighted by the explosion of firing. The "springs and bars" were barbs which would expand on impact, and cling to the enemy's sails, while the burning match would set them and the rigging afire. Particularly useful and dangerous in the West Indies and any extremely hot, dry climate.

FIRELOCK. See "Musket."

FLANKER. A piece mentioned by Floulkes as belonging to the mid-16th century; about 1547 and perhaps earlier. I have no further description of it, and it appears not to have been noticed by other writers. There is nothing to affirm or deny its use at sea.

FRAZER GUN. A modification, by Frazer, of the Armstrong gun, and very similar in appearance. See "Armstrong Gun."

GASCONADE. See "Carronade." Floulkes, quoting the Encyclopedia Brittanica of 1797, says it was a light species of gun resembling the cohorn, and was a forerunner of the carronade.

To be continued.

SHIP MODELLING SOCIETY OF VICTORIA

Robert A. Nash

Ship modelers in Melbourne, Australia are fortunate in that a very active organization known as the Ship Modelling Society of Victoria provides an attractive program for them. More enjoyment derives from any hobby that can be shared with others of similar tastes, and ship modeling is no exception. The importance of such a group as a medium for the exchange of ideas and as an impetus to the ship modeler cannot be overstressed. While not in direct competition with each other, the critical view of club members on one's latest project cannot help but spur the modeler on to progressively finer models. The Municipal City Authorities of Melbourne are not sea-minded and purely marine exhibits are scarce. There are

no marine museums in Melbourne.

Monthly meetings feature talks by members on the various phases of ship modeling. At these meetings also, many ingenious jigs and devices of the ship modelers craft are displayed. There are presently thirty-two members, of which some fifteen are exceptional in ability. Of these fifteen, ten specialize in sailing ship models, three in modern warships and two in steam and motor ships. Outstanding among models produced by members is a two foot built-up model of Nelson's flagship, H. M. S. VICTORY. This model, which was six years in the making, is said to be the finest detailed model in Australia.

At present some of the members are working on models for the 1949 Exhibition. Exhibitions are held periodically under the auspices of The Associated Model Societies, which consists of two delegates from each of the following organizations:

Ship Modelling Society of Victoria
Power Boat Society of Victoria
Miniature Racing Car Club
Hale's Creek Railroad
Model Railway Society
Model Aeroplane Club

The Exhibition runs for seven days from ten in the morning till ten at night and will be held in September or October, 1949. Unfortunately taxation is too high for any single group to hold their own exhibition and even after a combined effort little or nothing is realized by the participants. The 1946 Exhibition realized about $12,900 from the attendance of some 60,000 visitors. This money was distributed approximately as follows.

Town Hall Rents	$2,800
Lighting	800
Advertising	1,200
Cartage and Freight Charges	400
Charity (The Seamens Mission, etc.)	6,100
Clubs	1,200
Materials	400

Mr. J. A. Nicolson, a member of the Society has some very good advice for ship modelers as the following extracts from his letters will show.

"I am continually drumming into our members the necessity of preserving proportions in a model before all things. So much long and tedious work is undone by failing to maintain this rule and it is surprising how many good models are spoilt in this way. . .the scale of 20' to 1" I adopted some 15 years ago as the best for miniatures.-

Incidentally, the Admiralty here, also adopted this scale for models and so have many other waterline modellers and Societies. In recent years I have made realistic settings for my models. I have found this enhances them from a selling point and museums here seem keen on them, also shipping companies. I am afraid my members think me hard - again I emphasize to them that Ship-modelling is a highly specialised craft and that their craft is both purely born out of "Love of Ships" and the desire to create it's prototype in miniature, therefore strive to give the "world" the creation, the exact replica of the original down to the smallest detail of fittings and finish. In miniatures there is a small margin of error, - eliminate it to it's very minimum, and do not place your craftsmanship in unappreciative hands. I have usually found in the models I have sold, the purchasers are keenly appreciative of fine work, - invariably they are collectors and know their "ships" from "truck to keelsom". The manner in which they handle a model is quite sufficient in itself."

THE HALF MODEL

To some its just a block and board
That ornaments the wall.
Another sees the "handsome lines"
Of a vessel - - - large or small;
That sailed the deep blue sea,
Tacked against a sudden squall
Or, made port running free.

- Driftwood Gaff

A NOTE

The other day I saw a queer looking craft beyond Northern Avenue bridge, and by the look of her spars, I decided to investigate. Wandered through the mud past a wholesale lobster dealer's shack and across a 600-car parking lot and there she was, decks strewn with rusty pig-iron ballast, a modern electric winch, "snake's nests" of rusty 5/8" wire cable, and Irish pennants everywhere.- She had been-altered, built-up and torn down, and God knows what else, but there she was - what was left of an old time hermaphrodite brig - deadeyes and

all! I would guess that she was built in the era just after the Civil War - the 1880's at the latest - and she had an inlaid 12 spoke mahogany wheel that should be in a museum. The cabin companionway, solid mahogany, had apparently been moved to a position about "30 degrees eight minutes off course, "and every chock and bitt on her was ready for Davy Jones.. I asked a fellow (one of the wrecks aboard the wreck) where he got her, remarking that "there were not many of them left," and he replied "not a great lot" and dropped out of sight below. I still don't know what she was or her original port of hail, but was told that she'd been kicking around Beantown for a couple of years. (That's what I got for being moored to a sales counter, or I'd have known all about her long ago - now I can't get any information!) I made a sketch of her trailboard carvings (what was left) and of the wheel, trestle trees (the top was gone), and would guess that she may have been "Bluenose" or perhaps Maine built. Considerable rake to her main mast and a bowsprit (sawed off) that would measure about 28" thick! Built for carrying, although a clean entrance forward, I would think she could do eleven knots with a fair cargo in her palmy days. Maybe I'll find out about her sometime - she looks like the "Onaway," "Spinaway" and others of the same type which Capt. Ben Proctor used to know.

- Winthrop Pratt, Jr.

U. S. S. FRANKLIN

I note in the two photos sent by Mr. Lochhead that the FRANKLIN (III) went through about the same changes as the CONSTELLATION when rebuilt. The FRANKLIN (III) was a 74-gun line-of-battle ship built in 1815. In 1853 she was reconstructed into a steam frigate. The CONSTELLATION was rebuilt at about the same time. Judging from the picture of the FRANKLIN she was rebuilt with a steamboat stern in the same manner as the CONSTELLATION. Both ships had transom sterns before their rebuilding.

- Harry D. Hamilton

QUERY

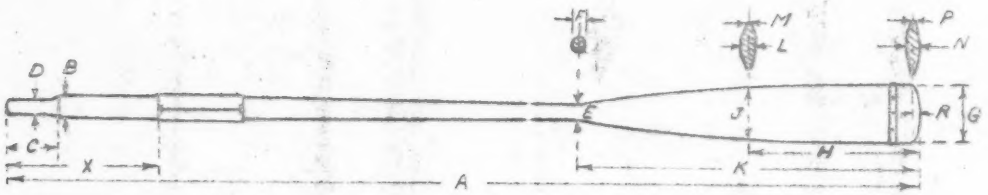
I know what actually governs the sizes of belaying pins, but have never seen a printed rule (contemporary) for same - no documentary evidence. We sold them at Bliss of course, but only when the customer said what size he wanted - and then only in bronze or galvanized. Where in the "briny bottom" did Bill Adams get it, and from what source?

Winthrop Pratt, Jr., 112 Woodrow Ave., Dorchester 24, Mass.

SPECIFICATION FOR OARS OF VARIOUS BOATS OF THE UNITED STATES NAVY
YEAR 1900

All oars to be made of the best quality tough white ash, thoroughly seasoned, of straight and close grain, free from knots, discoloration, streaks and other defects. To be hand dressed smoothly and well finished. Banded 2½ inches from outer end with 14-ounce copper 5/8 inch wide and secured with ⅜ inch copper tacks. All oars to be leathered with the best quality white rigging leather, tightly sewed on, seam to be flush. End of leather to be secured with ½ inch copper tacks, one on each side of seam. The leather for the 9-foot oars to be 10 inches long, all other sizes to be 12 inches long. The leather must conform to the following specifications: To be best quality white rigging leather, white oak to be tanned by the slow-process. No solutions, bark extracts, or chemical process may be used. Must be free from slaughter cuts, holes, or other defects. Weight per side about 8 pounds. Material, workmanship, and finish to be first-class in every respect. The dimensions to be strictly in accordance with the following table:

(From STANDARD BOATS OF THE UNITED STATES NAVY, Hichborn, Philip, Washington; 1900.)



A	B	C	D	E	F	G	H	J	K	L	M	N	P	R
FEET	IN.	IN.	IN.	IN.	IN	IN.	FT. IN.	IN	FT. IN.	IN.	IN.	IN.	IN.	IN.
18	2 3/4	9	1 1/2	2 5/16	2 3/16	6	4-3	5 1/4	6-0	1 3/8	1/16	1/2	1/16	1/2
17	2 3/4	9	1 1/2	2 1/4	2 1/8	6	4-0	5 1/4	5-8	1 5/16	3/16	1/2	3/16	1/2
16	2 3/4	9	1 1/2	2 1/8	2	5 3/4	3-6	4 3/4	5-4	1 1/4	3/16	1/2	3/16	1/2
15	2 3/4	9	1 1/2	2	1 7/8	5 3/4	3-3	4 1/2	5-0	1 3/16	3/16	1/2	3/16	1/2
14	2 5/8	8 1/2	1 1/2	1 7/8	1 3/4	5 1/2	3-0	4 1/2	4-8	1 1/8	3/16	1/2	3/16	1/2
13	2 5/8	8 1/2	1 1/2	1 7/8	1 3/4	5 1/2	2-9	4 1/2	4-4	1 1/16	3/16	1/2	3/16	1/2
12	2 1/2	8 1/2	1 1/2	1 3/4	1 5/8	5 1/2	2-6	4 1/2	4-0	1 1/16	3/16	1/2	3/16	1/2
11	2 1/2	6	1 1/2	1 5/8	1 1/2	5 1/2	2-3	4 1/2	3-8	1 1/16	3/16	1/2	3/16	1/2
10	2 3/8	6	1 3/8	1 5/16	1 1/16	5 1/2	2-0	4 1/2	3-4	1 1/16	3/16	1/16	3/16	1/2
9	2 1/8	5	1 1/8	1 1/16	1	5 1/2	1-9	4 1/2	3-0	1	3/16	1/8	3/16	1/2
A	B	C	D	E	F	G	H	J	K	L	M	N	P	R

NOTE:- (X) POSITION OF LEATHER VARIES BETWEEN 3'-0" AND 7'-0, DEPENDING ON LENGTH OF OAR AND TYPE OF BOAT.

SECRETARY'S NOTES

To my many friends in the Nautical Research Guild, I would like to apologize for not having answered their letters for such a long time. At the earliest opportunity I'll get back to my correspondence.

A local situation has demanded every bit of my time. Inasmuch as there is a "Nautical" connection I'll tell you something of it. The Los Angeles County Museum, in the heat of esthetic enthusiasm, has decided to close out the Mechanical Sciences Division. This Division contained many fine exhibits showing the development of photography, motion pictures, communication, aviation, automobiles and fire fighting equipment, but the subject of marine transportation was very poorly represented. Having spent a good number of years plugging for a West Coast Marine Museum similar to the fine museums on the East Coast, the closing of this Division appears to me to be a great opportunity to get something done about it. Southern California has seen a great growth of such organizations as the Nautical Research Guild, except that they are in other fields - mostly transportation, but along historical - mechanical lines. Naturally, the members of these organizations are somewhat put out by the action of the museum officials and the result was the formation of the COMMITTEE FOR THE FOUNDATION OF A TECHNICAL MUSEUM. This Committee proposes to form a non-profit corporation to foster and perpetuate a museum displaying the historical development of transportation, industry and manufacturing.

Members of the Nautical Research Guild in Southern California and the Southern California Chapter of the Steamship Historical Society of America are taking the initiative in this movement so if the museum materializes a section devoted to marine transportation is almost assured.

Guess all our ship modelers and other research workers are getting along all right this month as only one query has been submitted.

Check this from Mr. Richard E. Lawton, of New York City: "When I joined the Nautical Research Guild I stated that I was interested in early American Naval Vessels. Some time later I remarked that I was unable to locate any satisfactory information on the square sail as used on the foremast of the early schooners, and this was published in the monthly letter. Today, without any further discussion there arrived from Mr. Wayne E. Yarnall, in Pittsburgh, seven photostats of early American Naval Vessels, one showing clearly the square foresail on a schooner, the others being photostats of sail plans and body plans of various early ships and schooners, all very interesting and with one exception new to me. I know how

hard it is to locate this sort of thing, in fact, I never could locate the story of the fore-sail, but I have it now, thanks to Mr. Yarnall, and he doesn't know me from Adam's off ox. If there is a finer exchange of decent friendly cooperation, it never happened to me and I never heard of one. I only hope I can do as much for Mr. Yarnall or some other member of the N.R.G."
Thank you for your valued testimonial Mr. Lawton - the archives of the NAUTICAL RESEARCH GUILD should have a lot of these someday. Mr. Harry D. Hamilton, of Whittier, Calif. also has something to say on the subject: "In the May issue I sent in a query which asked the meaning of rigging terms of the 16th and 17th century ships. In the June issue a query was made by me on U. S. Navy ships named after Benjamin Franklin. The first query was answered to my complete satisfaction by Mr. Richard Lawton and I thank him very much. The second query was answered by Mr. Richard Lawton and Mr. John Lochhead, of Mariner's Museum. I am very grateful for such prompt and satisfactory answers. I will be happy to pass this information on to anyone desiring it."

The New York Herald Tribune for June 5 carried an interesting obituary concerning Obediah Jones, one of the last of the old time sailmakers. Mr. Jones was eighty-two and died at West Brighton, Staten Island. He was born on Staten Island and started his apprenticeship in the eighties. Mr. Jones was the superintendant of sailmakers for the old New York firm Prescott, Wilson Co. for nearly forty years. He made sails for hundreds of sailing ships including clippers, schooners, sloops, and racing yachts. The COLUMBIA and the RELIANCE in the early 1900's, both America's Cup winners, were among the ships he helped outfit.

Accompanying this number you will receive the first official issue of the Classified Lists of books in the Master Index. The other issue was not "official" - I forgot who I sent them to. Until such time as the Lists become larger you will have to contact me to find out who the owner of a particular item is.

Three more names have been added to our membership list. Mr. Albert E. Parsons, New York City, who has been compiling a catalog of authentic plans available to ship model builders from various sources - a very worthy project that will interest all our members. Mr. John Lyman, Oceanographer, U. S. Navy Hydrographic Office, of Washington D. C. certainly needs no introduction - his articles have appeared in American Neptune, Tiller, Mast, U. S. N. I. Proceedings, Mariner's Mirror, Marine Digest and others. Mr. Steward Elliott, San Francisco, is a model builder and operates retail hobby stores for ship model makers in that City. In his ship-modeling, he specializes in early American shipping. We welcome you to membership in the GUILD.

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